

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Masaaki Muramatsu et al.      Art Unit : Unknown  
Serial No. : 09/647,027      Examiner : Unknown  
Filed : September 26, 2000  
Title : METHOD FOR DETECTING CHANGES IN GENE EXPRESSION LEVEL IN  
CELLS THAT HAVE BEEN TREATED WITH TEST COMPOUND

**BOX PCT**

Commissioner for Patents  
Washington, D.C. 20231

RESPONSE TO NOTICE TO COMPLY WITH REQUIREMENTS  
FOR PATENT APPLICATIONS CONTAINING  
NUCLEOTIDE AND/OR AMINO ACID SEQUENCES

In response to the communication dated May 7, 2001 (copy enclosed), applicants submit herewith a Sequence Listing in computer readable form as required by 37 CFR §1.824. In addition, applicants submit a substitute Sequence Listing as required under 37 CFR §1.823(a) and a statement under 37 CFR §§1.821(f) and (g).

Please amend the application as follows:

In the specification

Applicants respectfully request entry of the substitute paper copy and computer-readable copy of the Sequence Listing filed herewith for the instant application. Please replace the original Sequence Listing with the substitute Sequence Listing.

CERTIFICATE OF MAILING BY EXPRESS MAIL

Express Mail Label No. EL 856747396 US

I hereby certify under 37 CFR §1.10 that this correspondence is being deposited with the United States Postal Service as Express Mail Post Office to Addressee with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

Date of Deposit

June 12, 2001

Signature

Samantha Bell  
Samantha Bell

Typed or Printed Name of Person Signing Certificate

Applicant : Masaaki Muramatsu et al.  
Serial No. : 09/647,027  
Filed : September 26, 2000  
Page : 2

Attorney's Docket No.: 06501-064001 / H1-802PCT-  
US

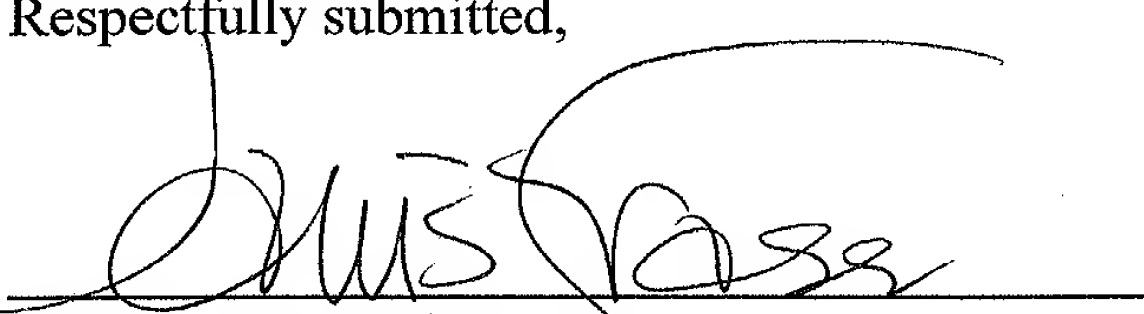
**REMARKS**

Applicants hereby submit that the enclosures fulfill the requirements under 37 C.F.R. §1.821-1.825. The amendment to the specification merely replaces the original paper copy of the Sequence Listing with a substitute paper copy of the Sequence Listing wherein the general information, such as serial number and docket number, has been amended to reflect the information for the instant application. No new matter has been added.

Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: June 12, 2001

  
Janis K. Fraser, Ph.D., J.D.  
Reg. No. 34,819

Fish & Richardson P.C.  
225 Franklin Street  
Boston, MA 02110-2804  
Telephone: (617) 542-5070  
Facsimile: (617) 542-8906

IN THE UNITED STATES RECEIVING OFFICE

Applicant : Masaaki Muramatsu et al.  
Serial No. : 09/647,027  
Filed : September 26, 2000  
Title : METHOD FOR DETECTING CHANGES IN GENE EXPRESSION LEVEL IN  
CELLS THAT HAVE BEEN TREATED WITH TEST COMPOUND

**BOX PCT**

Commissioner for Patents  
Washington, D.C. 20231

RESPONSE TO NOTIFICATION OF MISSING REQUIREMENTS

Responsive to the Notification of Missing Requirements under 35 U.S.C. 371  
mailed May 7, 2001 (copy enclosed), Applicants as a small entity submit herewith the following:

- ☒ Response to Notice to Comply, 2 pgs.; copy of Notification to Comply with  
Requirements, 1 pg.; Statements under 35 CRF 1.821(f) and (g), 2 pgs.; paper  
copy of sequence listing, 2 pgs.; and computer-readable diskette.

It is understood that this perfects the application and no additional papers or filing fees  
are required.

CERTIFICATE OF MAILING BY EXPRESS MAIL

Express Mail Label No. EL 856747396 US

I hereby certify under 37 CFR §1.10 that this correspondence is being  
deposited with the United States Postal Service as Express Mail Post  
Office to Addressee with sufficient postage on the date indicated below  
and is addressed to the Commissioner for Patents, Washington,  
D.C. 20231.

June 12, 2001  
Date of Deposit

Samantha Bell  
Signature

Samantha Bell  
Typed or Printed Name of Person Signing Certificate

Applicant : Masaaki Murama et al.  
Serial No. : 09/647,027  
Filed : September 26, 2000  
Page : 2

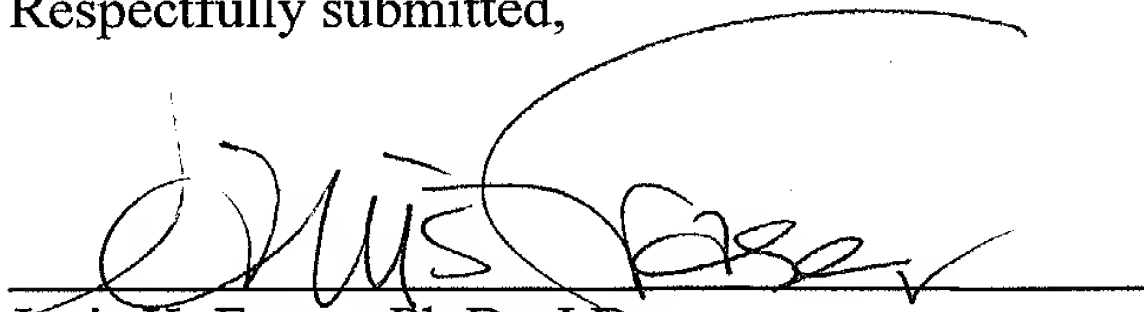
Attorney's Docket No.: 06501-064001

Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date:

June 12, 2001

  
Janis K. Fraser, Ph.D., J.D.  
Reg. No. 34,819

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225 Franklin Street  
Boston, MA 02110-2804  
Telephone: (617) 542-5070  
Facsimile: (617) 542-8906

20272875.doc



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents, Box PCT  
United States Patent and Trademark Office  
Washington, D.C. 20231  
www.uspto.govU.S. APPLICATION NO. /  
09/647027FIRST NAMED APPLICANT  
MURAMATSUATTY. DOCKET NO.  
M 06501 064001JANIS K FRASER  
225 FRANKLIN STREET  
BOSTON, MA 02110 2804Docketed By: Praxis Systems  
Action Code: Murray Keeg  
Base Date: 5-7-01  
Due Date: 7-7-01  
Deadline: 11-7-01  
Initial: JMG

INTERNATIONAL APPLICATION NO.

PCT/JP99/01574

I.A. FILING DATE

PRIORITY DATE

26 MAR 99

27 MAR 98

DATE MAILED:

07 MAY 2001

**NOTIFICATION TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS  
CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE  
DISCLOSURES**

Applicant has submitted papers under 35 U.S.C. 371 to enter the national stage in the United States of America. The items indicated below, however, are missing. The period within which to correct the deficiency noted below and avoid abandonment is set forth in the accompanying Notification.

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):

- ☐ The application fails to comply with the requirements of 37 CFR 1.821-1.825.
- ☒ This application does not contain, a "Sequence Listing" as a separate part of the disclosure on paper copy or compact disc, as required by 37 CFR 1.821(e).
- ☐ A copy of the "Sequence Listing", in computer readable format has not been submitted as required by 37 CFR 1.821(e).
- ☐ A copy of the "Sequence Listing" in computer readable form has been submitted. The content of the computer readable form, however, does not comply with the requirements of 37 CFR 1.822 and/or 1.832, as indicated on the attached marked-up copy of the "Raw Sequence Listing."
- ☐ The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
- ☐ The paper copy or compact disc of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 CFR 1.821(e).
- ☐ Other: \_\_\_\_\_

**APPLICANT MUST PROVIDE:**

- ☐ An initial or substitute computer readable form (CRF) of the "Sequence Listing."
- ☒ An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.
- ☒ A statement that the contents of the paper or compact disc and the computer readable form are the same and, where applicable, include no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b) or 1.825(d).

FOR QUESTIONS REGARDING COMPLIANCE WITH THESE REQUIREMENTS, PLEASE  
CALL:

(703) 308-4216, for Rules interpretation,  
(703) 308-4212, for CRF submission help,  
(703) 287-0200, for PatentIn software help.

Francine Young

Telephone: 703-305-3662

FORM PCT/DO/EO/920 (March 2001)

09/647027



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
Address: ASSISTANT COMMISSIONER FOR PATENTS  
Box PCT  
Washington, D.C. 20231

U.S. APPLICATION NO.	FIRST NAMED APPLICANT	ATTY DOCKET NO.
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INTERNATIONAL APPLICATION NO.
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I.A. FILING DATE	PRIORITY DATE
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DATE MAILED.

### NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

1. The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as

- ☐ a Designated Office (37 CFR 1.494),
- ☒ an Elected Office (37 CFR 1.495):
- ☒ U.S. Basic National Fee.
- ☒ Copy of the international application in:
  - ☒ a non-English language.
  - ☐ English.
- ☐ Translation of the international application into English.
- ☐ Oath or Declaration of inventor(s) for DO/EO/US.
- ☐ Copy of Article 19 amendments.
- ☐ Translation of Article 19 amendments into English.
- ☒ The International Preliminary Examination Report in English and its Annexes, if any.
- ☐ Translation of Annexes to the International Preliminary Examination Report into English.
- ☐ Preliminary amendment(s) filed \_\_\_\_\_ and \_\_\_\_\_.
- ☐ Information Disclosure Statement(s) filed \_\_\_\_\_ and \_\_\_\_\_.
- ☐ Assignment document.
- ☐ Power of Attorney and/or Change of Address.
- ☐ Substitute specification filed \_\_\_\_\_.
- ☐ Statement Claiming Small Entity Status.
- ☒ Priority Document.
- ☒ Copy of the International Search Report ☐ and copies of the references cited therein.
- ☐ Other:

2. The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- ☐ a. Translation of the application into English. Note a processing fee will be required if submitted later than the appropriate 20 or 30 months from the priority date.
  - ☐ The current translation is defective for the reasons indicated on the attached Notice of Defective Translation.
- ☐ b. Processing fee for providing the translation of the application and/or the Annexes later than the appropriate 20 or 30 months from the priority date (37 CFR 1.492(f)).
- ☒ c. Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
  - ☐ The current oath or declaration does not comply with 37 CFR 1.497(a) and (b) for the reasons indicated on the attached PCT/DO/EO/917.
- ☒ d. Surcharge for providing the oath or declaration later than the appropriate 20 or 30 months from the priority date (37 CFR 1.492(e)).

3. Additional claim fees of \$ \_\_\_\_\_ as a ☐ large entity ☐ small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due (37 CFR 1.492(g)). See attached PTO-875.

ALL OF THE ITEMS SET FORTH IN 2(a)-2(d) AND 3 ABOVE MUST BE SUBMITTED WITHIN ONE MONTH FROM THE DATE OF THIS NOTICE OR BY ☐ 21 OR ☐ 31 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

4. Translation of the Annexes **MUST** be submitted no later than the time period set above or the annexes will be cancelled. Note processing fee will be required if submitted later than 30 months from the priority date.

5. ☐ The Article 19 amendments are cancelled since a translation was not provided by the appropriate 20 (37 CFR 1.494(d)) or 30 (37 CFR 1.495(d)) months from the priority date.

Applicant is reminded that any communication to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above. (37 CFR 1.5)

**A copy of this notice *MUST* be returned with this response.**

Enclosed: ☐ PCT/DO/EO/917 ☐ Notice of Defective Translation  
☐ PTO-875

FORM PCT/DO/EO/905 (December 1997)

Francine Young  
National Stage Processing  
Paralegal Specialist  
(703) 305-3662



## UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents, Box PCT  
United States Patent and Trademark Office  
Washington, D.C. 20231  
www.uspto.gov

U.S. APPLICATION NO. 09/647027 FIRST NAMED APPLICANT MURAMATSU M ATTY. DCKET NO. 06501 064001

INTERNATIONAL APPLICATION NO.

PCT/JP99/01574

JANIS K FRASER  
225 FRANKLIN STREET  
BOSTON, MA 02110 2804

RECEIVED

MAY 09 2001

FISH & RICHARDSON, P.C.  
BOSTON OFFICE

I.A. FILING DATE

26 MAR 99

PRIORITY DATE

27 MAR 98

DATE MAILED:

07 MAY 2001

## NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

1. The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as ☐ a Designated Office (37 CFR 1.494) ☒ an Elected Office (37 CFR 1.495):

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> U.S. Basic National Fee.   | <input type="checkbox"/> Indication of Small Entity Status.                                    |
| <input checked="" type="checkbox"/> Copy of the international application.   | <input checked="" type="checkbox"/> Translation of the international application into English. |
| <input checked="" type="checkbox"/> Oath or Declaration of inventors(s).   | <input type="checkbox"/> Translation of Article 19 amendments into English.                    |
| <input type="checkbox"/> Copy of Article 19 amendments.  | <input type="checkbox"/> Other:  |
| <input checked="" type="checkbox"/> Priority Document.   |  |
| <input checked="" type="checkbox"/> The International Preliminary Examination Report in English and its Annexes, if any. |  |
| <input type="checkbox"/> Translation of Annexes to the International Preliminary Examination Report into English.        |  |

2. ☐ Applicant has requested early processing under 35 U.S.C. 371(f) but has not filed the following indicated items and/or the indicated items in paragraph 3 below. The Basic National Fee and the copy of the international application must be filed prior to 20 or 30 months from the priority date to avoid abandonment.

- |   |   |
|---|---|
| <input type="checkbox"/> U.S. Basic National Fee. | <input type="checkbox"/> Copy of the international application. |
|---|---|

3. The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- |   |  |
|---|--|
| <input type="checkbox"/> a. Translation of the application into English. A processing fee will be required if submitted later than the appropriate 20 or 30 months from the priority date.  |  |
| <input type="checkbox"/> The current translation is defective for the reasons indicated on the attached Notice of Defective Translation.  |  |
| <input type="checkbox"/> b. Processing fee for providing the translation of the application and/or the Annexes later than the appropriate 20 or 30 months from the priority date (37 CFR 1.492(f)).   |  |
| <input type="checkbox"/> c. Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), properly identifying the application (preferably by the International application number and international filing date). A surcharge will be required if submitted later than the appropriate 20 or 30 months from the priority date. |  |
| <input type="checkbox"/> The current oath or declaration does not comply with 37 CFR 1.497(a) and (b) for the reasons indicated on the attached PCT/DO/EO/917.  |  |
| <input type="checkbox"/> d. Surcharge for providing the oath or declaration later than the appropriate 20 or 30 months from the priority date (37 CFR 1.492(e)).  |  |

4. Additional claim fees of \$\_\_\_\_\_ as a ☐ large entity ☐ small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due (37 CFR 1.492(g)). See attached PTO-875.5. ☒ Applicant has not submitted the required sequence listing pursuant to 37 CFR 1.821-1.825. See attached PCT/DO/EO/920.**ALL OF THE ITEMS SET FORTH IN 3(a)-3(d), 4 AND 5 ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 22 OR 32 MONTHS (where 37 CFR 1.495 applies) FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

6. If box 3a or 3c is checked, a translation of the Annexes **MUST** be submitted no later than the time period set above or the Annexes will be cancelled. A processing fee will be required if submitted later than 20 or 30 months from the priority date.7. ☐ The Article 19 amendments are cancelled since a translation was not provided by the appropriate 20 (37 CFR 1.494(d)) or 30 (37 CFR 1.495(d)) months from the priority date.

Applicant is reminded that any communication to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above. (37 CFR 1.5)

**A copy of this notice MUST be returned with this response.**Enclosed: ☐ PCT/DO/EO/917  
☐ PTO-875☐ Notice of Defective Translation  
☒ PCT/DO/EO/920

Francine Young

Telephone: 703-305-3662

FORM PCT/DO/EO/905 (March 2001)

JKF  
JTL  
AWNotated By Practice Systems  
Action Code: MIBING PCT/JP99/01574  
Base Date: 5-7-01  
Due Date: 7-7-01  
Deadline: 11-7-01  
Initial: JMC7-7-01  
11-7-01  
JMC